

Colville National Forest

Fiscal Year 2012 Forest Plan Monitoring and Evaluation Report



Pacific Northwest Region
765 South Main
Colville WA 99114
www.fs.usda.gov/colville



for the greatest good

Colville National Forest

Forest Plan Monitoring and Evaluation Report: 2012

Table of Contents

	Page
Introduction -----	2
Forest Plan monitoring results	
General -----	3
Range -----	5
Fish, Water & Riparian Resources -----	6
Wildlife -----	8
Timber & Forest Health -----	10

Introduction

The purpose of this report is to provide the results of monitoring the implementation of the Colville National Forest Land and Resource Management Plan (Forest Plan) during Fiscal Year (FY) 2012 (October 1, 2011 – September 30, 2012) to the Forest Supervisor, the Regional Forester, and the public.

This report focuses on the monitoring and evaluation process described in Chapter V of the Forest Plan and as updated through Forest Plan amendment and Forest Service direction. It is not intended to be a complete overview of the many accomplishments and activities on the Colville National Forest during this time period.

Summary information for individual monitoring items is located on pages 3 through 12. Some items listed individually in the Forest Plan are grouped together in this report as resource impacts are intertwined.

Acronyms used in this document:

BMP = Best Management Practices

BMU = Bear Management Unit

FY = Fiscal Year

NEPA = National Environmental Policy Act

OHV = Off Highway Vehicle

RMEF = Rocky Mountain Elk Foundation

Monitoring Item

General

The following monitoring items were reviewed as part of existing condition review and effects analysis for projects reviewed under NEPA direction and incorporated into monitoring conducted in combination with other resources during fiscal year 2012. Therefore, these resource areas do not have separate discussions in this report.

Visual Quality

Soil

Facilities/Roads

Cultural Resources

Minerals

Review of NEPA documents and monitoring conducted by other resource specialists shows that each of the resource areas listed above are meeting standards and guidelines located in the Forest Plan.

Wilderness, Wild and Scenic Corridors

There were no changes to acres or condition of existing Wilderness or Potential Wild and Scenic corridors.

Monitoring Item

General

Project compliance with National Environmental Policy Act (NEPA)

Decision Memos	
Resource Area	Number
Recreation, Engineering, Lands & Minerals	10
Vegetation Management	2
Fish Habitat/Water Quality Enhancement	1
Range Management	1
Wildlife Habitat Improvement	1
Total	15

Decision Notices	
Resource Area	Number
Recreation, Engineering, Lands, & Minerals	5
Vegetation Management	2
Total	7

Other		
	Number	Disposition
Appeals	2	One decision upheld; one decision withdrawn
Litigation	0	No litigation cases were filed or active during FY 2012
Amendments to the Forest Plan	0	

Specific resource monitoring results are displayed under the monitoring items on the following pages.

Monitoring Item

Range

Monitor range improvements, utilization of forage, and conditions of riparian and range resources.

Twenty-six (26) allotments across the Forest were monitored for compliance with annual operating instructions. Items monitored included: range readiness, utilization, compliance, maintenance of range improvements and Best Management Practices (BMP) monitoring. Forest and District range management specialists also monitored implementation of requirements that were designated in recent NEPA decisions including placement of water sources (e.g., troughs), new fence, and installation of hardened crossings. Monitoring occurred during November 2011 and between May 10 and October 31, 2012.

All allotments met conditions as set forth in their respective grazing permit.

Twelvemile Allotment — End of season monitoring
(November 2012)



Monitoring Item

Fisheries, Water, and Riparian Resources

Monitor habitat capability and productivity for fish species; water quality; management of riparian resources such as wetlands and floodplains.

Work completed by Forest Damage Response Team

In 2012, the Forest Damage Response Team surveyed 75% of the Vision 2020 area for OHV-related impacts. A total of 155 impacted sites were identified. The crew repaired 67 of these sites with fences to block unauthorized access, picked up garbage, placed brush on slopes, and planted native plants. Monitoring of the Chewelah and Calispell sites showed that the fences were successful. In a few cases, the fences were bypassed or taken down. The breached sites were part of a larger issue that will be addressed by the South End Project or the Power Lake Project. Effective closure means the structure stayed intact. An ineffective closure means that OHVs were bypassing the structure.

Area	Effective Closure	Ineffective Closure	Total
Calispell	6	2	8
Chewelah	22	1	23
Kettle Face	11	2	13

Ninety one closed roads (outside grizzly bear recovery area) were visited. Closure type and effectiveness calls were made. Not effective means that tire tracks were found past the closure device. Of the roads visited, 50 had effective closures and 41 were not effective.

Implementation monitoring of FY12 projects:

Improve fish passage = 1.2 miles
(Replace culverts to allow fish passage)

Road decommissioning = 10 miles

Aquatic habitat restoration = 16 miles

Eurasian milfoil removal = 125 acres

Monitoring showed all aquatic improvement projects met direction as outlined in the Forest Plan and relevant NEPA documents.

Photos show before and after conditions within Coyote Creek area.



Monitoring Item

Fisheries, Water, and Riparian Resources (continued)

Monitor habitat capability and productivity for fish species; water quality; management of riparian resources such as wetlands and floodplains.

Colville National Forest 2012 BMP Summary

BMP monitoring on the Colville National Forest was led by hydrology personnel and the team included fire, range, and engineering specialists, as well as available contractors. Although many resource specialists collaborated to varying extents as an interdisciplinary team, a subset of resource specialists generally carried out the field portion of the evaluation. The National BMP protocol was used. National BMP implementation and monitoring forms and instructions were used, and site selection was determined primarily based on project availability and the timing of completed implementation.

Number of evaluations completed in
FY 2012: 30

Results:

It was found, in most cases, that projects were being implemented in accordance with implementation and effectiveness of BMPs and design criteria.

Fecal Coliform Monitoring

The Forest is currently monitoring 14 sites in compliance with Washington Department of Ecology standards.

Level or upward (improving) trends were determined for the following creeks: Cottonwood, Lambert, North Fork Lone Ranch, North Fork Sanpoil River, Smackout, South Fork Chewelah, South Fork Lost, and Winchester.

Level or downward trends were determined for the following creeks: Lost, Ruby, South Fork Mill, West Fork Trout, and Wilson (first year of monitoring for this stream).

Temperature Monitoring

The Forest monitored 15 sites in FY 2012 and is adding more sites each year.

Summary

Restoration work completed by the Forest Damage Response Team, Forest partners and employees, and implementation of range allotment improvements, are resulting in measurable improvement in fish habitat and stream conditions.

Activity	# points	BMP
Aquatic Ecosystem Management	2	AqEco A
Fire Management	12	Fire A
Rangeland Management	4	Range A
Roads Management	5	Roads A - 1
		Roads B - 2
		Roads E - 1
		Roads F - 1
Water Uses Management	7	(Water Uses A)

Monitoring Item

Wildlife

Monitor habitat for Forest Plan Management Indicator Species

Forest employees accomplished & monitored implementation of approximately 6,2073 acres of wildlife habitat improvement. This includes improving browse habitat through prescribed burning in cooperation with Rocky Mountain Elk Foundation, stewardship contractors and Forest fire crews. It also includes removal of conifers from hardwood pockets to encourage hardwood regeneration; fencing to limit browse impacts from cattle and riparian impacts from human use; creation of leaning tree habitat for fledgling owls; and thinning of dense stands to increase browse species in the understory. Prescribed fire resulted in increased quantity and quality of big game forage habitat. Known & newly found goshawk nests were surveyed for all vegetation management projects. Nest and fledgling sites were protected during project implementation.

Activity	acres
Prescribed fire (non-stewardship projects)	3,189
Prescribed fire (stewardship projects)	3,041
Cottonwood restoration	3
Owl trees	40

Monitoring forest carnivores on the Kettle Crest –

Partner: Kettle Falls High School

For the past two years the Forest has set a series of hair snares and camera sets in the Kettle Crest in an attempt to obtain photos and hair of wolverines. Wolverines in the Cascades differ genetically from those in the Rockies; however, a hair sample from a wolverine near the Kettle Crest in 2005 yielded too little DNA to determine relationships.



Monitoring pre- and post-harvest canopy cover, snags and shrubs – Partner: Kettle Falls (KF) Elementary (4th grade)

For two years the KF 4th grade students surveyed two plots in Deadman to obtain pre-harvest levels of trees, canopy cover, shrub cover and wildlife use (determined from cameras). In early 2013 the plots were harvested, and now the students will begin monitoring the post-harvest conditions and vegetation response to increased light. Prescribed fire is proposed for the stand, and the classes will monitor pre- and post-burn conditions. The project will continue for at least 5 more years.



Road closure effectiveness in winter range – Partner: Conservation Northwest (CNW)

In summers of 2010 and 2011 CNW intern Tom Hurst surveyed all road closures in winter range areas across the Colville National Forest. Closure effectiveness for the 585 road closures examined was higher than expected: about 10% require some maintenance to improve the berm and less than 5% showed signs of being frequently breached.

Monitoring Item

Wildlife

Monitor habitat for Threatened, Endangered and Sensitive Species

Grizzly Bear

Road Obliteration

LeClerc Bear Management Unit (BMU): approximately 2.6 miles of road were re-routed away from Middle Branch LeClerc creek and onto uplands located west of the original alignment. Effectiveness of rehabilitation work was monitored during activities.

Closed Road Monitoring

The Forest attempts to monitor closed roads in the recovery area several times a season to check for illegal motorized use behind closures. The Forest logs this data and all incidents of vandalism to gates, locks, and signs in road closure monitoring notebooks. Collected data is used to improve closure effectiveness and inform Forest user groups.

LeClerc BMU: Fifty-nine roads and 18 road closures were monitored. Three breaches were detected.

Salmo BMU: Forty-three roads and 18 road closures were monitored. One breach detected.

Sullivan –Hughes BMU: 15 roads and four road closures were monitored. No breaches were detected.

Habitat improvement

To minimize risk of human-bear encounters, Sullivan Lake District installed six food storage containers within the Selkirk Grizzly Bear Recovery Area. Effectiveness of placement and use is monitored during summer camping and fall hunting seasons. Reviews indicate containers are appreciated by Forest visitors and vandalism is minimal. No boxes have required replacement.

Woodland Caribou

During the winter of 2011/2012, Forest Protection Officers (FPOs) completed seven weekend patrols on snowmobile in the Forest's portion of the Selkirk Mountains Woodland Caribou Recovery Area. In the winter of 2011/2012 a small number of illegal entries by snowmobile riders onto Molybdenite Ridge, via closed Forest Road 1936010, were detected. There were no other incursions on closed roads or high ridges in the Forest's portion of the recovery area.

In FY 2012, FPOs completed 22 weekend visitor contact patrols in the recovery areas for grizzly bears and caribou. Conservation Northwest provided \$6,000 in cost-share funding for this work.



Monitoring Item

Timber and Forest Health

Monitor restocking of lands; timber yields; silvicultural practices; special forest product management; and insect & disease presence.

Firewood Permits	2,700	
Miscellaneous Permits	671	
Commercial Sales (>\$300 each)	4	
Volume Sold (commercial sales)	31,285	MBF (59,933 CCF) ¹
Volume Cut (commercial sales)	33,084	MBF (63,094 CCF)
<hr/>		
Non-commercial activities (acres)		
Pre-plant surveys	485	
Reforestation (planting)	494	
Stocking surveys	394	
First year survival surveys	100%	Newport-Sullivan Lake District
	86%	Three Rivers & Republic District ²
Third year survival surveys	100%	Newport-Sullivan Lake District
	70%	Three Rivers & Republic District ²
Certification - natural regeneration	61	
Site preparation for planting	302	
Precommercial Thinning	1,933	

Insect & Disease Monitoring

Presence of insect and disease populations were reviewed through aerial surveys, review of areas being analyzed for vegetation management and review of areas under vegetation management contracts. Mountain pine beetle and spruce budworm populations are expanding in the west half of the Forest. Mountain pine beetle is approaching outbreak level along the Kettle Crest. Other insect and disease populations are at endemic levels on the Forest.

¹ MBF = thousand board feet; CCF = hundred cubic feet

²Survival affected by lack of rain following planting and rocky conditions in some of the units. Approximately 90% of acres were certified as fully stocked.

Monitoring Item

Timber and Forest Health (continued)

Monitor restocking of lands; timber yields; silvicultural practices; special forest product management; and insect & disease presence.

Timber Sale Monitoring

Monitoring of preparation and harvest activities occurred by Forest Service interdisciplinary team members on the following commercial sales: Finn, Kettle Face, Kettle North, Hanlon, Misery Lake, Scotchman, Summit Pierre, and Walker. Monitoring of Misery Lake Timber Sale was also completed by Northeast Washington Forestry Coalition.

All projects met Forest Plan direction and followed requirements and direction in the respective decision documents.



Kettle Face North Unit 114 – thinning



Summit Pierre Units 31 & 331
variable density thinning



Misery Lake – hardwood retention



Summit Pierre Unit 18 – treatment of
ladder fuels

Monitoring Item

Timber and Forest Health (continued)

Monitor restocking of lands; timber yields; silvicultural practices; special forest product management; and insect & disease presence.

Fire/Fuels Management

Forest employees monitored changes to fuel levels and post-treatment conditions on 2,705 acres (Newport-Sullivan District) and more than 602 acres (Republic District) treated by slashing, biomass removal, grapple piling, mastication and prescribed burning. All projects met objectives outlined in pertinent decision documents, unit-specific burn plans and Forest Plan standards and guidelines to reduce fuel loading, raise crown base height, reinvigorate shrub/forb species, and/or prepare sites for reforestation activities.



Cascade Rocky Mtn Elk Foundation (RMEF) burn: implementation monitoring



Quartzite 73 Prescribed Burn—Photos points pre- and post-burn



The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, sexual orientation, marital status, family status, status as a parent (in education and training programs and activities), because all or part of an individual's income is derived from any public assistance program, or retaliation. (Not all prohibited bases apply to all programs or activities.)

If you require this information in alternative format (Braille, large print, audiotape, etc.), contact the USDA's TARGET Center at (202) 720-2600 (Voice or TDD).

If you require information about this program, activity, or facility in a language other than English, contact the agency office responsible for the program or activity, or any USDA office.

To file a complaint alleging discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call toll free, (866) 632-9992 (Voice). TDD users can contact USDA through local relay or the Federal relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice users).

USDA is an equal opportunity provider and employer.